

# COMMODORE

**BUSINESS MAGAZINE**  
OCTOBER 1985

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Winner ON TEST**

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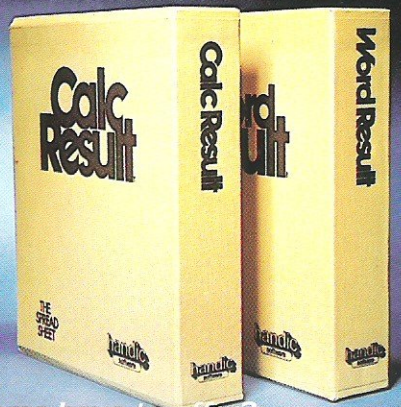
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## Providing software solutions

Designed exclusively for business, SoftShop is tagged 'the one-stop-shop for business'.

Ex-Commodore Mark Horne is heading the operation with Bhavesh Patel – considered an expert in business software – as operations manager.

Softshop is an independent company operating in selected Ryman branches. As an official dealer for Ashton-Tate, CompuSoft, Digital Research, Psion, Sage, and Pegasus and others, SoftShop offers over 350 business packages.

It also offers demonstrations, consultancy, take-away demonstration packs, 24-hour maintenance, leasing and comprehensive after sales services.

In addition to software SoftShop also stocks hardware. It does not push any particular make of computer. (It is interesting to note though that SoftShop is a registered Commodore dealer).

There are currently four SoftShops, all within London branches of Ryman. They are situated at:

15 Lower Regent Street. Tel: 01-839 2940

19-20 High Holborn. Tel: 01-831 0437

66 Tottenham Court Road. Tel: 01-636 3110

24-27 Thayer Street. Tel: 01-935 2218

Why were Ryman chosen? Horne says: "We chose Ryman for their innovative entrepreneurial management and business reputation.

"Also it is a natural supply line in small and medium businesses." Since the installation of two test sites this spring, SoftShop has proved to be a successful concept.

Funded by, among others, 3i Investors in Industry – the world's largest venture capital company, Horne expects to make profits in excess of £600,000 in the first year.

SoftShop has a strategy of low fixed cost structure. There are no overheads situated as the shops are within Ryman – Soft-

Shop pays Ryman a percentage of each sale. This is an agreement which is said to suit both companies well.

Another advantage for SoftShop is the strong support being received by the software houses themselves.

Accounting for this initial success, Horne says: "We supply the user with what he wants. We can offer eight-hour on-site servicing, on-line leasing, and try and buy software.

"Customers can buy demonstration software and if they are happy with the product they get their money back – 60% do buy.

"We plug, install and test software for the customer and only leave when it is up and running."

## Perch Emulators from Mator

Mator Limited, a well known company in the PC compatible data communications market, has now released its Perch range of Communications emulation software for the Commodore PC.

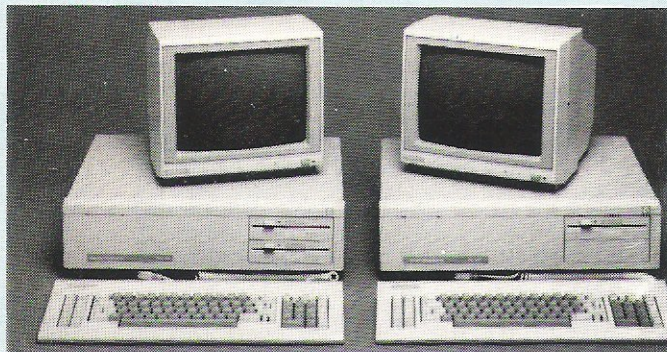
Using this equipment enables the PC to communicate with ICL, IBM and Burroughs mainframes.

Perch allows both batch and interactive sessions to run concurrently. It's fully menu-driven, offers local or remote connections and gives a choice of line speeds.

Perch is available both for floppy discs and in a different form of transfer to hard disk.

Available only through Mator, Perch costs £400 for a one-off.

Contact: Mator Limited, Kingsway House, 134-140 Church Road, Hove, Sussex BN3 2DL. Tel: 0273 726464/7.



### CONTRIBUTORS

|                                |    |                         |       |
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| DDL                            | 9/17   | Distribution by Magnum Distribution<br>Ltd, Clerks Court, 18-20 Farringdon<br>Lane, London EC1R 3AU. |
| Dialog Software                | 34/IBC | Printed by Chase Printers Group,<br>London and St. Austell.  |
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### You Can't Knock It

Unlike a standard hard disk subsystem the BORSU 10+ drives are virtually indestructible. Visitors to the BORSU stand at a recent trade show were amazed to see disk cartridges hurled to the floor and the drive itself thumped, bumped and even turned upside-down *during a read write operation!* In terms of the maintenance of data integrity these acts of apparent vandalism went totally unnoticed by disks and drives alike.

### Safety First is the Key

With storage density of 24,000 bits per inch the BORSU 10+ drives need a fairly extensive error correction scheme, and the designers have responded to this need – with a vengeance. Although each of the 306 tracks actually contain 70 sectors, only 64 are released to the user. Of the remaining 6 sectors one provides a 4096 bit parity check for the rest of the track. The other five sectors act as substitutes should any of the regular sectors become unusable.

There are also an extra 4 tracks on each disk which can be brought into use if an entire track should prove defective. Now that's what I call data protection!

### Wolf in Sheep's Clothing

If your thinking on mass storage systems is in a rut, prepare to change your views. Traditionally, you buy a hard disk system with 5, 10, 20 megabytes of storage, as the case may be, and what you see is what you get. Now BORSU have changed all that.

Buy a BORSU 10+ dual disk subsystem and you start at 20 megabytes (10 Mb per drive). For just

£75, however, an extra removable cartridge will add a further 10 Mb capacity, ad infinitum.

### The Disk that Cleans Itself

The revolutionary BORSU 10+ 'flying disk' drive has overcome one of the biggest threats to the safe storage of computer data – the stray speck of dirt.

Firstly, the read/write head is above the surface of the disk – which means that dirt will normally fall off the head area before it can do any damage. But that's only half the story.

In the BORSU 10+ system a major feature is

the constant airflow between the disk and a rigid metal plate above it. This constant draught, flung out from the region of the drive shaft, actually cleanses the entire work area with every revolution, a sort of vacuum cleaner in reverse. And this isn't just a clever idea – it works!

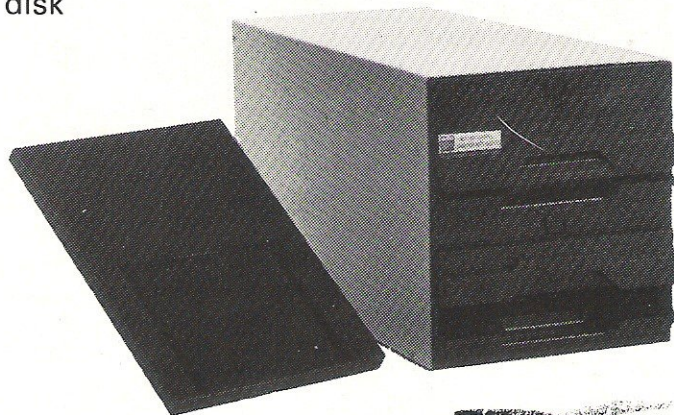
### Running Rings Round Tape

Whilst several companies are putting their trust in high-speed, multi-band tapes as the best back-up to a hard disk BORSU knows different.

After several years of exhaustive R&D the new BORSU 10+ drives look set to knock both tapes, and possibly even hard disks, clear out of the ring. After all, what's the point of tying yourself to single hard disk units when you can get the same kind of storage density (10 megabytes per drive), faster operations (under 5 seconds spin-up time, 35 msec access time), and all the disk space you could ever need on easily exchangeable cartridges – with none of the limitations of a tape?

## YOU CAN ACHIEVE 20 MEGABYTES FROM YOUR MICRO AGAIN AND AGAIN

- High capacity storage – 20 Mbytes formatted
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- Ten times faster data transfer than floppy disk



- Simple copy across
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# Samleco DX 85

## The lowest cost, most versatile high speed Dot Matrix Printer yet.

You told us what you wanted so we went ahead and did it.

### Features include:

- ★ Automatic paper loading
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- ★ Range of languages
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- ★ IBM PC Compatible version
- ★ Combined friction and adjustable pin feed
- ★ Suitable for all commercial and business applications
- ★ Can connect to

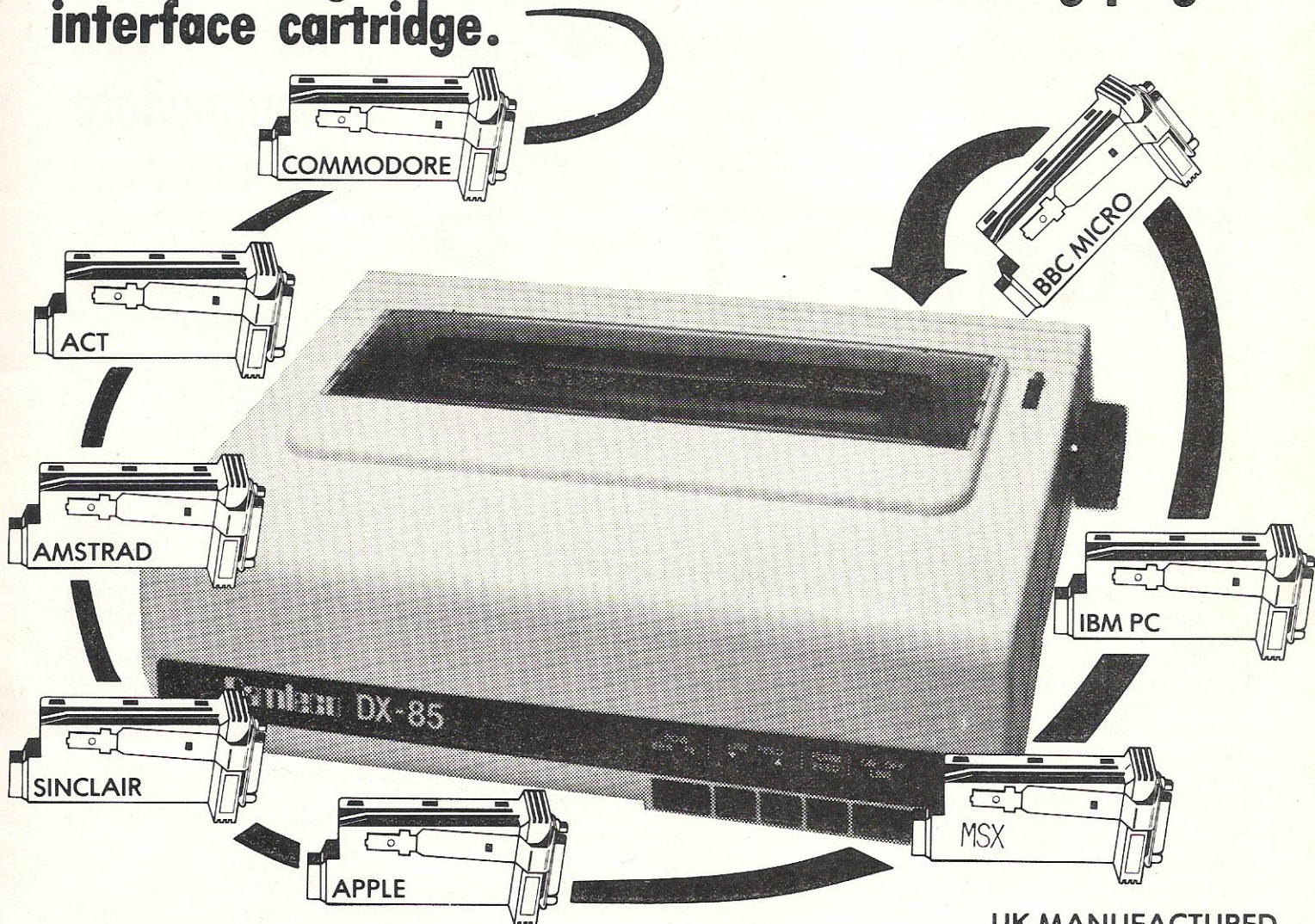


- most computers
- ★ Robust construction
- ★ Latest technology
- ★ Ribbon cartridge or spools.

### Specification:

**Speed:** 120 cps, bi-directional, short line seeking. **Columns:** 80 to 136, (at 17 cpi). **Matrix:** 9 x 9. Character set: Full 96 ch ASCII with 11 language variants. **Graphics:** Uni-directional, bit image. **Forms handling:** Forward/reverse with programmable line spacing. **Interfaces:** Centronics parallel, RS 232 serial, Commodore. **Size:** Width 370mm, Depth 280mm, Height 130mm, Weight 6kg.

### Suitable for direct connection to all leading PCs and Business micros using plug-in interface cartridge.



Someone had to do it...

**Samleco Ltd**

9 Fairacres Ind. Est., Dedworth Road, Windsor, Berks SL4 4LE, England.  
Tel: Windsor (07535) 54717/8. Telex: 838791.

## Caxton announce new software

Caxton Software Ltd has recently announced some new pieces of software which will run on the Commodore PC.

The first is 'Memory Shift'. This is designed to allow you to load different programs into different areas in memory and allow them to transfer data from one to the other. It can handle up to nine programs at once, as long as there is sufficient memory and in theory sounds extremely useful.

The second program is called 'Smart Path'. The real problem with programs originally converted to MSDOS is that they use overlay files, meaning that all the files must be in the correct directory or the program will crash or require much director swapping. What Smart Path does is to use the resident



'PATH' command to make these overlay files search through all the directories, hence saving time.

Memory Shift is under £150

and Smart Path is under £60.

Contact: Caxton Software Ltd, 10-14 Bedford Square, Covent Garden, London WC2 9HE. Tel: 01-379 6502.

## IBM 'deny' mythical new PC

Last month's unheard of statement from IBM denying that they were planning to release a new PC (nicknamed unexcitingly the PC-2) has done very little to slow the gossip.

Seen by most in the industry as no more than an attempt to revive the dwindling market in IBM PC's, even IBM have not managed to convince people that the now four-year-old PC is not in for an update shortly, especially with the problems caused by the PC-AT.

## Telewriter to be available for Commodore PC's

Kyle-Price and Whitehead, a Guernsey-based software group is at the moment converting its well reviewed TeleWriter for the Commodore and other PC compatibles.

Designed to be a first, TeleWriter is an on-line word processor. What it does especially well is to allow you to create a neat and well written document and then transmit it.

It also turns your computer into a terminal capable of communicating with other computers, either down the phone, using an acoustic coupler or modem, or directly using the RS232 port.

Perhaps the best function is that it allows you to load letters which were waiting for you on Telecom Gold into TeleWriter, and then edit them and print them to your satisfaction.

Although not priced yet, TeleWriter is likely to be good value for money, and we will be reviewing it in more detail in the next Business Magazine.

Contact: Bristol Software Factory, Thornton House, Richmond Hill, Clifton, Bristol BS8 1AT. Tel: 0272 735022.

# From PET to PC

Using 3D's interface, it is possible to transfer data files from your old PET to Commodore's new PCs

3D Digital Design & Development was initially approached for custom-built interfaces such as IEEE-488 analog to digital and digital to analog convertors and relay control units for the early Commodore computers.

It comes as little surprise, perhaps, that 3D are keeping pace with Commodore's product advances in making available an interface which allows one to transfer data from a PET to a PC.

The existence of data built up on your business' computer over the years plays not an insignificant role in the decision

to upgrade to a newer incompatible machine. If you are a PET user, 3D's interface allows you to upgrade with ease.

It looks likely that the interface will allow conversion of not only basic data, but preformatted word processing and spreadsheet data. This could prove invaluable to businesses that store forecasts on their current PET and are not willing to sacrifice previous work purely for upgrade purposes.

Available at £220 plus VAT, 3D's IEEE-RS232C interface enables you to transfer files from 8032/8296 to the Commodore PC or any other IBM compati-

bles and vice versa. Features include:

**A 2K buffer which leaves one computer free whilst the other can be carrying on with something else.**

**DTR, CTS plus X-on/X-off.**

**A very useful function is the programmable baud rate which allows you to choose speeds varying from 50 to 19200 cpa. It also formats data and successfully converts code.**

Contact: 3D Digital Design and Development, 18/19 Warren Street, London W1P 5DB. Tel: 01-387 7388.

# Bessey Speaks Out On

**In the words of general manager Nick Bessey, "The awareness of Commodore as a business supplier has been limited". Here he tells CCI how he intends to reinstate Commodore in the business market**

# Business

**W**e started the business system market, perhaps with the help of Apple," says Bessey.

"The gap in our business systems strategy has been a product gap in 1983/84, during which time IBM took a dominant position.

"With the launch of the PC10 and 20, and the emergence of the Amiga, the situation is changing."

Joining Commodore after 12 years with IBM, Bessey is well-suited to head Commodore's attack on the business front.

"It is a very competitive market," says Bessey. "I recognise the size of that challenge."

One of his first tasks on joining the company was to establish a strong team of professionals with business expertise.

Bessey says: "I now have a team of 20 people, all with a strong PC business background. That has built up the level of expertise here at Corby."

An advertising promotion was also undertaken to increase awareness in the business sector. Commodore placed

**"Good product, good prices and good distribution"**

advertises in the national press emphasising price and performance of the PC's. Bessey says: "The promotion we did was expressly a short term way of advertising the Commodore image. It was not strongly response based. Though we did receive thousands of enquiries."

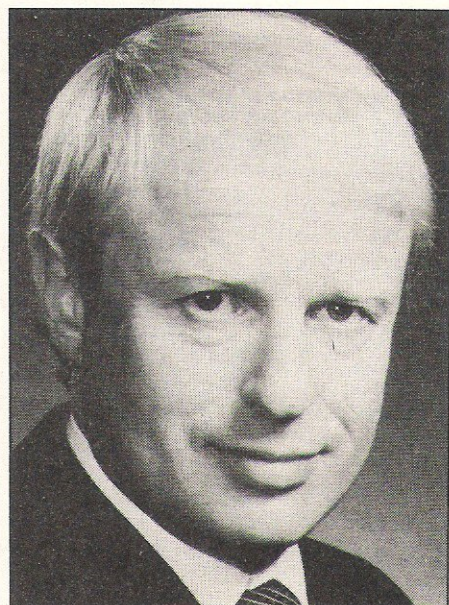
Commodore is quickly building up an efficient dealer network taking into consideration geographical location and quality dealership.

In addition to wanting only the best dealers, Commodore is also concerned with making the dealers comfortable with Commodore.

"We are offering the dealers a good product, good prices and unique distribution," says Bessey.

Commodore is also assisting its PC distributors in promoting awareness for the PC10 and 20.

"All the distributors have had the opportunity to hold open days," says Bessey. "Our distributor in Ireland, Tomorrow's



World, have run television advertising. Most of these marketing activities have been funded by Commodore."

In the UK there is a strategy towards Commodore Business Centres. The difference is that Commodore dealers buy from distributors, whereas business centres buy direct from Commodore. There are 45 Commodore Business Centres in the UK at present.

The machine that will steal the limelight at the beginning of 1986 is the much-talked about Amiga.

Bessey says: "The really big driving force behind the Amiga is its ability to do what can't already be done on PCs.

The Amiga is set for a January launch.

"When I arrived at Commodore in April, the plan was to announce the Amiga in February," says Bessey. "I could announce it this November, but it is not a good time of the year to come out with a new product."

**"Amiga will get approval based on MSDOS compatability"**

Another advantage in waiting until January is that a large range of Amiga software will be available.

"The Amiga will get approval based on MSDOS compatability," says Bessey. "The pre-requisites being compatability with other MSDOS PCs.

"Why Amiga MSDOS," he continues. "There will be a lot of attractive business software using this approach with the advantage of compatability."

Bessey says that a number of software houses in the UK are preparing unique Amiga product.

"Having software developed by outside companies is the only way to guarantee sufficient quantity of software," says Bessey.

"We have deals with a large number of software houses and we are in uniquely good shape to ensure quality control," he continues.

"We get involved in terms of reference, and more importantly we are involved in the product. On top of that we have 30 people who evaluate software products."

Developing software on the Amiga is a comprehensive process and Commodore are contacted almost on a daily basis.

Bessey says: "By January we expect to have quite a number of entirely new software offerings taken from the US and also developed by UK software houses."

Commodore is demonstrating its faith in

**"We will take 20% of the business market sector"**

the Amiga with Bessey's claim that it will take 20% of the business market sector.

He says: "If we take the 1986/87 financial year starting July 1986, this is the year we expect to have 20% of the market."

Enquiries as to what machines we can expect from Commodore in the future are met by an exasperated look from Bessey.

He says: "We will have released the PC10 and 20 and the Amiga within twelve months and we have built a strong team with expertise in business marketing.

"Also we will have established a strong dealer network and will set a standard in service to the dealer - that's enough for the first twelve months!"

# PCs On The Move

## NORBAIN MICROS

“As we have never stocked PCs before, we didn't really know what to expect. We have been a little disappointed. There are so many compatibles on the market that competition is fierce.

From the response point of view people are very impressed. We ran a software compatibility challenge to find software that wouldn't run on the PC. Nobody could find anything.

For us it isn't a good time to launch a product, but people who have seen it will definitely come back to it later.

At an open day we had a lot of interest and sold eight. If Commodore's name was banded around more it would help.”

## Hugh Symons

“Our initial launch has been very successful. The dealers have accepted the PC and we are sure it will do very well.

We are new on board, but after just three weeks we are already ordering our second batch from Commodore. As soon as we get the machines in, they are out!

Response has been good. Dealer roadshows which are being planned will help even more.

We are deferring payment for dealers for 60 days to show that we are sold on the Commodore PCs.

Sales compare favourably to those of Olivetti and Compaq. As far as software compatibility problems are concerned, it's a little too early to judge.”

## PETE 'N' PAM

“We are finding that the machine is going well – not as well as IBM, as one might expect.

It is well priced in comparison to machines like Compaq.

There has been a mixed response, people either love it or they hate it. The dealers that are against it are probably those already stocking a number of compatibles and who see it as just one more to support.”

## NORTHAMBER

“We had a Commodore open week at the end of June which aroused a great deal of interest. A lot of dealers who weren't familiar with Commodore in the past were able to see all the equipment in operation.

It was a great success and we had a high number of sales. It certainly increased awareness and we seem to be gaining in the amount of enquiries we receive.

Response has been at least as good, if not better than expected. More dealers now seem to be expressing an interest in Commodore.”

## STC

“The product is excellent and has been selling very well. We think the pricing advantage is very significant and gives it an edge over other products in the market.

The product has moved as well as was expected. It is always difficult for a new product, especially one launched in the summer months when the market is quiet.

Once the summer break is through, as we are already seeing, the product will start moving in quantity.”

## WESTWOOD

“We are not over-enthusiastic with results so far. It's a good machine, but we are not shifting a lot.

There have been absolutely no problems with software compatibility and the people who have taken the PCs so far have been very happy. Commodore are trying to improve what they are doing in the form of advertising and promotion which should help.

There are so many compatibles, something is needed to make it different. At the price, it competes directly with the Olivetti.”

## MICRO SYSTEMS

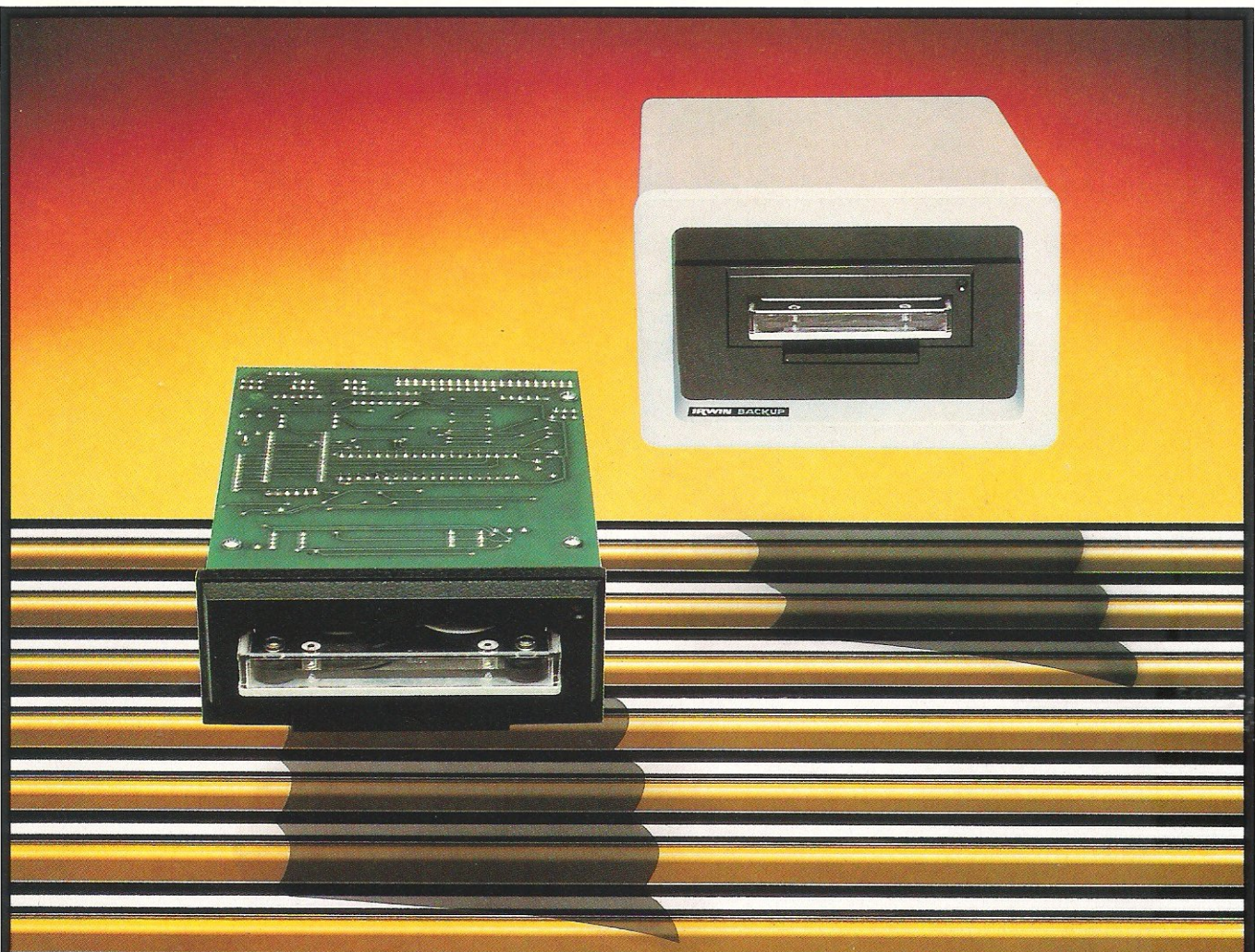
“We were a little bit late coming into Commodore. After just four weeks it has started to go well. Everyone who sees it rates its performance and price highly.

The biggest problem is that Commodore have a track record of machines that have been brought in too late and have been unreliable. A lot of ex-Commodore dealers have had their fingers burnt. However we are confident that we can overcome this as the product is good and we have not come across any software compatibility problems.

I see a very good future for the Commodore PCs. I am confident that we will see the product eating away greatly the Apricot market.”

– What the distributors say





# Back up your data with **IRWIN**<sup>TM</sup>

Just imagine the following scenario. Someone makes a mistake, power fluctuates, your hard disk crashes or the software fails. And the MD has just phoned for a print-out.

The result, heaven forbid, is all that vital information lost forever.

To protect you against such an eventuality, Irwin have developed fail-safe backup to copy your data.

The Irwin internal 110, 125 and external 310, 325 tape streamers.

For complete peace of mind with a big byte.

Take the Irwin 110 for example. A 5¼ inch half height with 10 megabytes of formatted capacity in a DC-1000 cartridge.

Or the little Irwin 125. Another half height with a large 20 megabyte appetite for the IBM-AT.

Both are compatible with most leading PC's and are easy to integrate. They simply daisy chain onto your existing floppy controller.

Just add a simple software driver and an applications program for file transfer and you're all set to go.

They are both remarkably rugged and reliable and offer media interchangeability.

They also happen to be the smallest tape streamers on the market.

Finally, the Irwin 310 and 325 tape streamers.

Designed as the perfect companions to the IBM PC, XT and compatibles and also the PC-AT, these stand-alone units hold 10 or 20 megabytes of data.

They are fast, small and compact and have many times the storage capacity of floppy disks.

You'll find that all Irwin tape streamers give you a unique combination of toughness, low price and high dependability.

Ring us on Ascot (0990) 28921 for the name of your nearest dealer. Then you can rest safe in the knowledge that your irreplaceable data is protected by the best backup there is.

Irwin tape streamers.

Just in case the impossible happens.



**THE NEW FORCE IN DISTRIBUTION**

5 King's Ride Park,  
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Telex: 846303 DDLTDG.



The daunting task of choosing a business system becomes far more enjoyable when you consider the new Commodore PC's pedigree:

Made by the first micro-computer company to achieve a £1 billion turnover.

Follows on from the PET: not only the UK's first, but also its most successful micro-computer.

Genuinely IBM® PC compatible, so you gain the full benefit of the latest

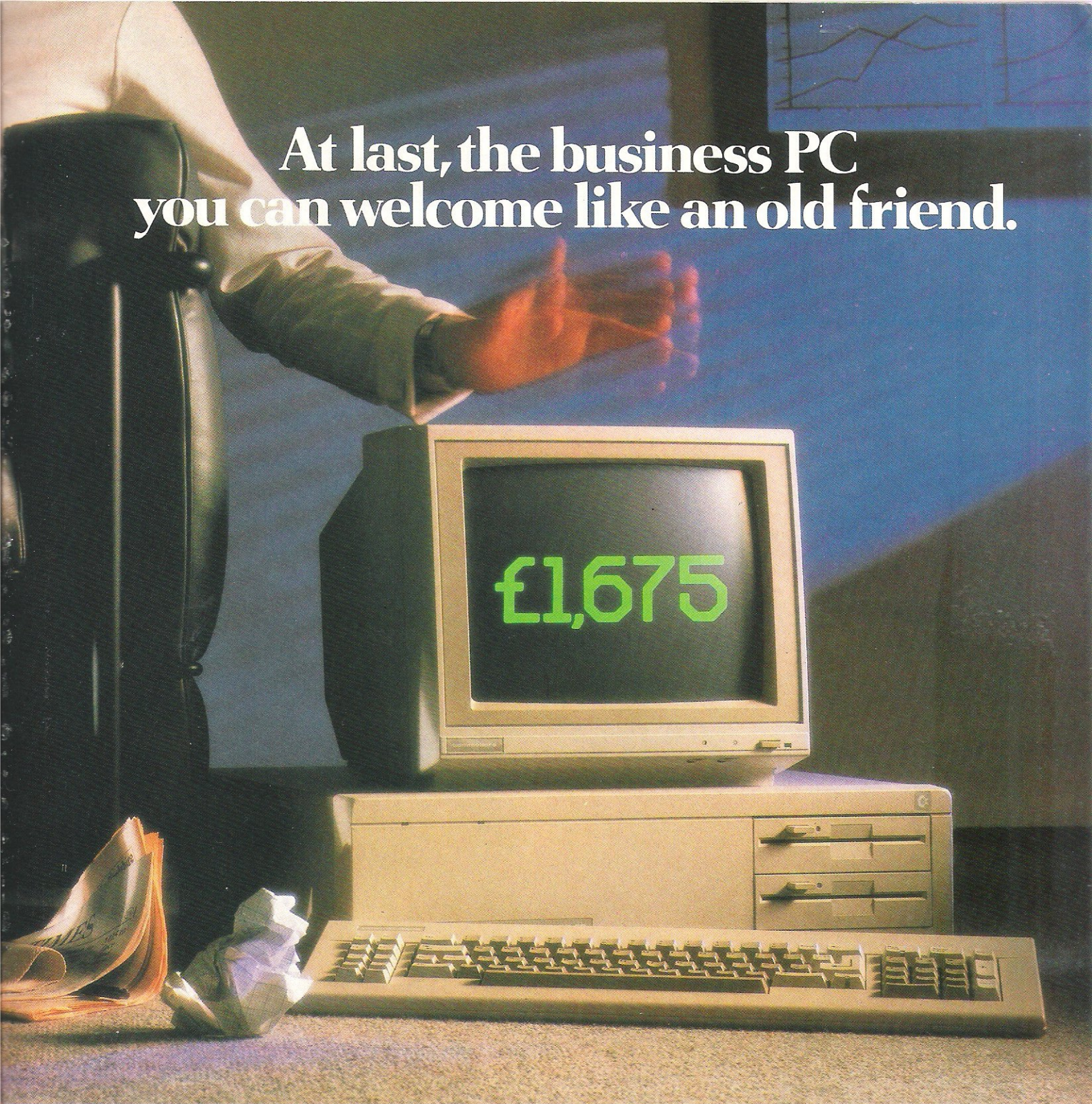
and best software, and can handle all your business needs including database, spreadsheets and wordprocessing.

Full 12 months Warranty and Commodore's PC Cover Plus to extend it.

The basic specifications include dual 5¼" floppy disk drive, (hard disk version will also be available), 256K RAM, interfaces, a 16 bit processor, and the big 12 inch screen.

The price, considering this kind

At last, the business PC  
you can welcome like an old friend.



of pedigree is quite outstanding: £1,675.

Any of the other major comparable PC's will cost you, at the very least, 10% more.

Finally there's a tailored leasing package and all the top-class training and service backup you'd expect.

You're welcome to come and see a demonstration at your local Commodore dealer. Full details are on PC Hotline telephone: 0536 205252.

For further details send this coupon to the Commodore Information Centre, 1 Hunters Road, Weldon, Corby, Northampton NN17 1QX.

Please send me full details of the new Commodore PC, and the address of my nearest dealer.

NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_



BY APPOINTMENT TO HER MAJESTY  
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PC CCI 0785

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# The New MT 85/86 printers are as quiet as a...



Commodore PC-10 compatible

Take a listen to the new MT85 and MT86 serial matrix printers. They're amazingly quiet. Which makes their performance definitely something to shout about.

The MT85 is a compact 80 column printer, while the MT86 offers a full 136 column width. Both print high speed draft output at 180 cps. And high quality

correspondence at 45 cps in various typesets. Then there's compressed, expanded and bold print for even more variety. And of course graphics.

Flexibility doesn't stop there either. Both printers take continuous fan fold and single sheet stationery in their stride. And they're totally hardware and software compatible via plug-in interface

modules with most popular micros.

The new MT85 and MT86 from Mannesmann Tally. Europe's leading matrix printer manufacturer.

The quiet revolution in print. Contact us now for our literature pack.



**MANNESMANN  
TALLY**

MANNESMANN TALLY LIMITED, MOLLY MILLARS LANE, WOKINGHAM, BERKSHIRE, RG11 2QT. TELEPHONE (0734) 788711

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# How to buy your PC

## FINANCIAL SERVICES PACKAGE

### How the service works

#### 1. Factoring

- The distributor or dealer can draw from Boston Financial up to 80% cash immediately against invoices raised. The balance of 20%, less charges, is available when Boston have collected the debt due from the customer.
- Boston operate the sales ledger on your behalf and will provide credit information on your customers and a professional credit collection service on your sales ledger keeping you constantly informed and up to date.
- Boston will statement your customers on your behalf saving you time and expense which can be used to develop your sales.
- Boston have agreed to consider companies for Factoring with turnovers in excess of £500,000 per annum.

#### 2. Confidential Receivables Financing

- The distributor or dealer can draw from Boston Financial up to 75% cash immediately against invoices raised. The balance of 25%, less charges, is available when you have collected the debt due from your customer.

- You continue to operate your sales ledger just as you do now. The Finance available under this scheme is therefore confidential to your customers.

- Boston Financial have agreed to consider applications from Commodore distributors and dealers for this scheme with annual turnovers in excess of £1.5m.

#### 3. Stock Financing

- Boston Financial will consider applica-

tions for stock financing. The funding is available on designated showroom/warehouse Commodore stock. The amount available will therefore differ with each individual application but could be up to 50% of the cost value.

- This arrangement is only for companies applying for the Factoring or Confidential Receivables Financing arrangements.

## COMMODORE LEASE PACK

United Financial Services are a predominantly computer leasing company with a strong link with IBM. It was therefore a natural progression to lease other computers such as the PC10.

Managing director, Sam Geneen, explains the Commodore Lease Pack: "What we are offering dealers is tailor made leasing schemes for customers. Commodore discussed it with us and told us the requirements of the user.

We are offering financing for hardware and software over a period of time, therefore spreading the cost and paying on a monthly basis. This is generally over three years, although we would consider up to five years.

There are two options — Lease Hire and Lease Purchase. Lease Purchase is becoming more popular as leasing rates come closer to lease purchase rates.

The advantages of leasing are:

- 1 Spreads costs and repayments over a period of time.
- 2 The customer pays a fixed amount over a period of time.
- 3 Companies may not have the budget to purchase, but they may have a certain amount to spend each month.
- 4 Offers small business users an additional credit line, without affecting bank credit.

We feel that the Commodore PC is going to do well. It's priced correctly and Commodore has a good following."

# Where to buy your PC

To find your nearest dealer, phone one of the distributors listed below.

Westwood, 116-118, Tennant St., Five Ways, Birmingham, B15 1EY.  
021-643 4419

P&PMicros, Todd Hall Road, Carrs Industrial Est., Haflingden, Ruffendale,  
Lancs. 0706 217744

Norbain Micros, 14-16 Boutton Rd., Reading, Berkshire, RG2 0LT. 0734 752201

Northamber Plc., Unit B3,4,5, Chessington Park Industrial Est., Lion Park Ave.,  
Chessington, Surrey, KT9 1ST. 391 2066

STC, Edinburgh Way, Harlow, Essex, SM20 2DE. 0279 26811

Hugh Symons Distribution, 5 Holdenhurst Road, Bournemouth, BH8 8EH,  
0202 26535

Micro Systems, Brikat House, 35-41 Montagu St., Kettering, N. Hants,  
NN16 8XG.

# Communications: getting the message through

---

There is more to computers than data-processing and number-crunching. We tell you how to benefit in the expanding computer world of communications

---

Today's business buzz-word in the information technology sector must be communications. Tired of using their computers purely for data processing and number crunching. Businessmen are seeing real possibilities in the ever expanding world of modems, baud rates and downloading.

Commodore's PC, and all other MSDOS machines are well provided for when it comes to modems, and, as with almost anything in the computer market, you can pay as much or as little as you want.

The minimum requirements to get yourself 'on-line' are as follows:—

A 300/300 baud modem or acoustic coupler.

A RS232 (or similar) port and cable.

Some communications software.

A telephone or jack socket.

## Modems for PCs

As I said, these are all minimums with which you can access almost all the important on-line mainframes or Bulletin Boards. To get the most from your computer and to save time, an auto-dial modem would be a justifiable extra. The two most commonly used baud rates are 1200 receive/75 transmit and 300/300. Both these transmit speeds are reliable and do not try to get too much out of the phone line. Therefore you are unlikely to lose large amounts of data through line noise.

In my view a modem is far more preferable to an acoustic modem, unless you will be using a portable computer and therefore need something truly transportable. One modem which seems to be popular amongst PC users is Tandata's Tm512, a high quality modem with auto-dial and answer and a variety of software packages available to match your needs. (I will be writing a full review of this product in the next Business Magazine.)

The two most popular reasons for pur-

chasing a modem are Prestel and Telecom Gold. Both of these are inexpensive ways of accessing large amounts of general data such as, in Prestel's case, flight arrival times, weather forecasts and entertainments guides. Although these are useful facilities they are not ones which show the enormous capabilities of the computer-phone link. One thing Prestel is very good for, however, is learning the format of general Bulletin Boards and outside databases. Operating almost throughout on menus, they are simple but the more you practice the more time is saved when logging on purely to find one piece of information.

## Mailbox Services

Telecom Gold has developed in a different direction to Prestel, and has become widely known as the biggest Mailbox service in England, and being truly international it is just as simple to send a message from Melbourne to Edinburgh as it is to send one from north to south London.

For anyone who has never used a mailbox system before, what it basically does is store any messages in a mainframe wherever the link is, and when the person to whom you sent the message to logs on, it is displayed on his screen and he is free to read it at his leisure.

This may sound no different from the system on which Telex is based, but the messages are more personal (and the spellings better!) and for the security minded amongst us this is an important consideration.

There are other Mailbox bases available, such as Istel and One-to-One, both of which operate in a similar fashion. The best thing to do is examine each and see which suits you best. For companies, the most practical is to set up their own, thus saving money on charges and being able to have it designed to personal specifications.

## Information retrieval

Perhaps the most useful on-line facility apart from Mailbox is information retrieval. Using bases such as Datasolve you can access almost any information on anything you want. One such example of this is the 'World Reporter'. What this does is allows you to search through the files to read articles from any of the papers and magazines it has stored in memory. Taking 'World Reporter' as an example, it has thousands of articles stored from journals such as the Financial Times, the Guardian, the Washington Post, Associated Press and many others.

To read a specific article you just tell it to search for a specific word and it will then display all the articles with that word in, as a list, you can then narrow the list down with a more specific word, and so on until you find the relevant article. Having found the article you can then either download it into your computer or, more practically, dump it to their lazer printer. They will then post it that day and, post willing, you will receive it in the morning.

## Not an executive toy!

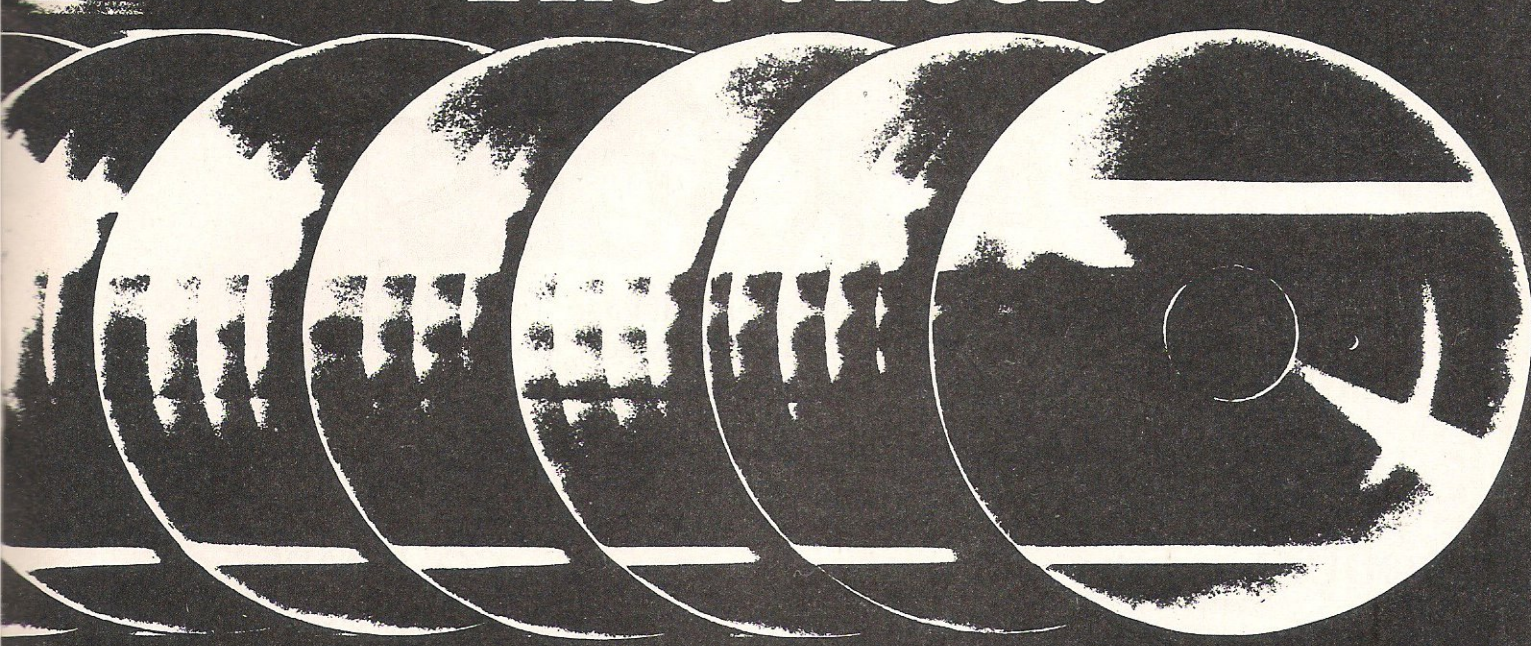
Facilities like these however do not come cheap, and at £1.00 per minute it is unlikely to be justifiable as an executive toy!

The last item of real interest I am going to talk about is British Telecom's PSS (Packet SwitchStream). The real advantage of this is that computers running at different speeds can communicate, as all the data is sent in 'Packets' rather than true transmission.

If you are interested in this subject as a consumer, I would recommend reading the 'Communications Management Yearbook 1985' published by EMAP at £34.95. Although expensive it is both interesting and technically accurate, and we will be reviewing it soon.

FKJ

# The Wheel.



## We haven't re-invented it.

## Simply programmed it to turn your accounts around faster than you could possibly imagine.

There's nothing fancy about Pegasus Business Accounting...except its revolutionary speed. Harness Pegasus to your computer and watch.

At your command, Pegasus will record sales. Issue invoices. Update your stocks. Process your payroll. Perform, in fact, any one of the thousand functions that today's complex business accounting demands.

All with perfect accuracy. And at a speed you won't believe until you see it.

Yet for all its pace, Pegasus puts you in control. It processes information only at the rate you want. Prompts you politely through every step in its impeccable accounting routines. And without complicated codes... just simple, direct English.

With the versatile eight-module Pegasus system,\* you can start small, and grow. Begin with Sales Ledger, for example. Then build on it module by module to match your needs.

It's not difficult to see why 14,000-odd organisations large and small have purchased approaching 40,000 modules already.

This is business software that brings a new speed and sensitivity to the classic accounting problems. See it in action at your Pegasus Approved Dealer now (they are spread nationwide). Simply clip the coupon to discover the nearest. And be prepared for a revolution.

**\*The Eight-Module System:** Sales, Purchase, Nominal, Invoicing/Sales Order Processing, Stock Control, Job Costing, Payroll, Bill of Materials. All feature their own unique Report Generator.

Pegasus Software Ltd., Freepost, Brikat House, Montagu Street, Kettering, Northamptonshire NN16 8XG  
Tel: 0536 522822 Telex: 341297 BRIKAT G.



To: Pegasus Software Ltd., FREEPOST, Brikat House, Montagu Street, Kettering, Northamptonshire NN16 8XG. Telephone: 0536 522822 Telex: 341297 BRIKAT G

I would like to see Pegasus Software in action. Please send me further information and tell me where I can see the system in operation.

Name \_\_\_\_\_ Title \_\_\_\_\_  
(BLOCK CAPITALS PLEASE)

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

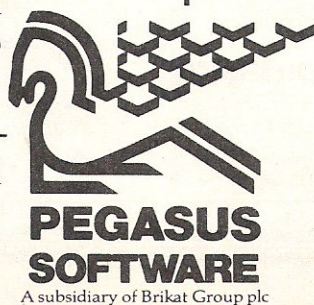
Tel: \_\_\_\_\_ Telex: \_\_\_\_\_

Type of business: \_\_\_\_\_

Our present microcomputer is \_\_\_\_\_

We don't own a computer

No time to fill in the coupon? Just attach your business card.



CLIP THE COUPON AND START COUNTING FAST

# TOP 10 BUSINESS PACKAGES

The list of the best-selling business packages for IBM PCs and compatibles compiled by SoftShop.

It should be noted that several packages are sold direct to dealers by the manufacturers; no account of these is included.

Also note that Multimate International has recently been purchased by Ashton-Tate.

| <b>PRODUCT</b>                                     | <b>COMPANY</b>          |
|--|-------------------------|
| 1 Multimate – Word processing system               | Multimate International |
| 2 Supercalc 3 release 2 – Spreadsheet              | Sorcim/IUS              |
| 3 Wordstar 2000 – Word processing system           | Micropro International  |
| 4 Crosstalk XVI Terminal emulator + communications | Microstuf               |
| 5 dBase 3 - Database manager                       | Ashton-Tate             |
| 6 Wordstar Professional – Word processing system   | Micropro International  |
| 7 Xchange – Integrated package                     | Psion                   |
| 8 Framework – Integrated package                   | Ashton Tate             |
| 9 Cardbox Plus – Database manager                  | Business Simulations    |
| 10 Lotus 1-2-3 – Spreadsheet                       | Lotus Development       |

**SELLING WELL**

Microsoft Mouse

Microsoft

Flight Simulator

Microsoft

Gem Desktop

Sorcim/IUS

Super Project

Hardware Ltd

384K Multi Function Board

Sagesoft

Sage Accounts

Digital Research





## Seikosha. Advanced business printers for every size of business.

Whether you're in business in a small way or running a vast Multinational, you need the most advanced, reliable, high performance printer you can buy.

And that means Seikosha.

Because Seikosha produce a range of up-to-the-minute printers to suit everyone, from the smallest to the largest volume business user.

What all Seikosha printers share in common however, is an unbeatable combination of high speeds, superb quality printing (including NLQ), low noise levels and the most advanced multi-function features you'll find today.

Of course this is no more than you would expect from the "House of Seiko".

Take the BP 5420 for example.

Fast, quiet and designed for heavy duty use, it combines high speed quality print at 420 cps (draft) and 104 cps (NLQ) with an 18K buffer. For ease of operation all user controls, plus the selector switch

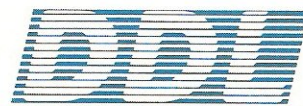
for the 8 built-in fonts, are located on the front panel of the printer. Parallel and serial interfaces are standard.

Then, exclusively for the IBM PC and compatibles are the BP 5420I and BP 5200I.

The BP 5420I combines most of the features of the BP 5420 printer with all IBM characters, symbols and graphics as standard. The BP 5200I operates at 206 cps (draft) and 103 cps (NLQ) and represents one of the best value printers of its kind on the market.

Finally, the compact SP NLQ printer series meets the needs of smaller businesses.

Available from all leading computer dealers. Distributed exclusively by DDL. For details of your nearest stockists contact:



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# ON TEST

**H**ard on the heels of the PC10, Commodore has taken another step to re-establish itself as a leader of the business market by introducing a hard disk version, the PC20.

As we noted in our first impressions (see Commodore Business Magazine July 1985), the PC20 is an IBM XT clone aimed at the business user with a substantial amount of data to control.

Outwardly, the only difference between the PC20 and the 10 is the former's blanking panel where the lower drive aperture appears on the PC10. Inside it has one 360 KB floppy drive and a 10MB Winchester disk. (for other specifications see box).

The PC20 is undoubtedly agreeably designed with an attractive cream and grey colour scheme. It gives a well engineered feel and is clearly built to last. It would add to the decoration as well as the efficiency of any office.

The instructions are clear and simple to follow; the setting up is easy and going through the prompts for date and time quick and smooth.

The monitor impressed us greatly. Is it the highest quality screen around? We certainly felt that its crisp green lettering was the best we have viewed. Eye comfort is an important point with the likelihood of someone, possibly you, spending long hours staring at it.

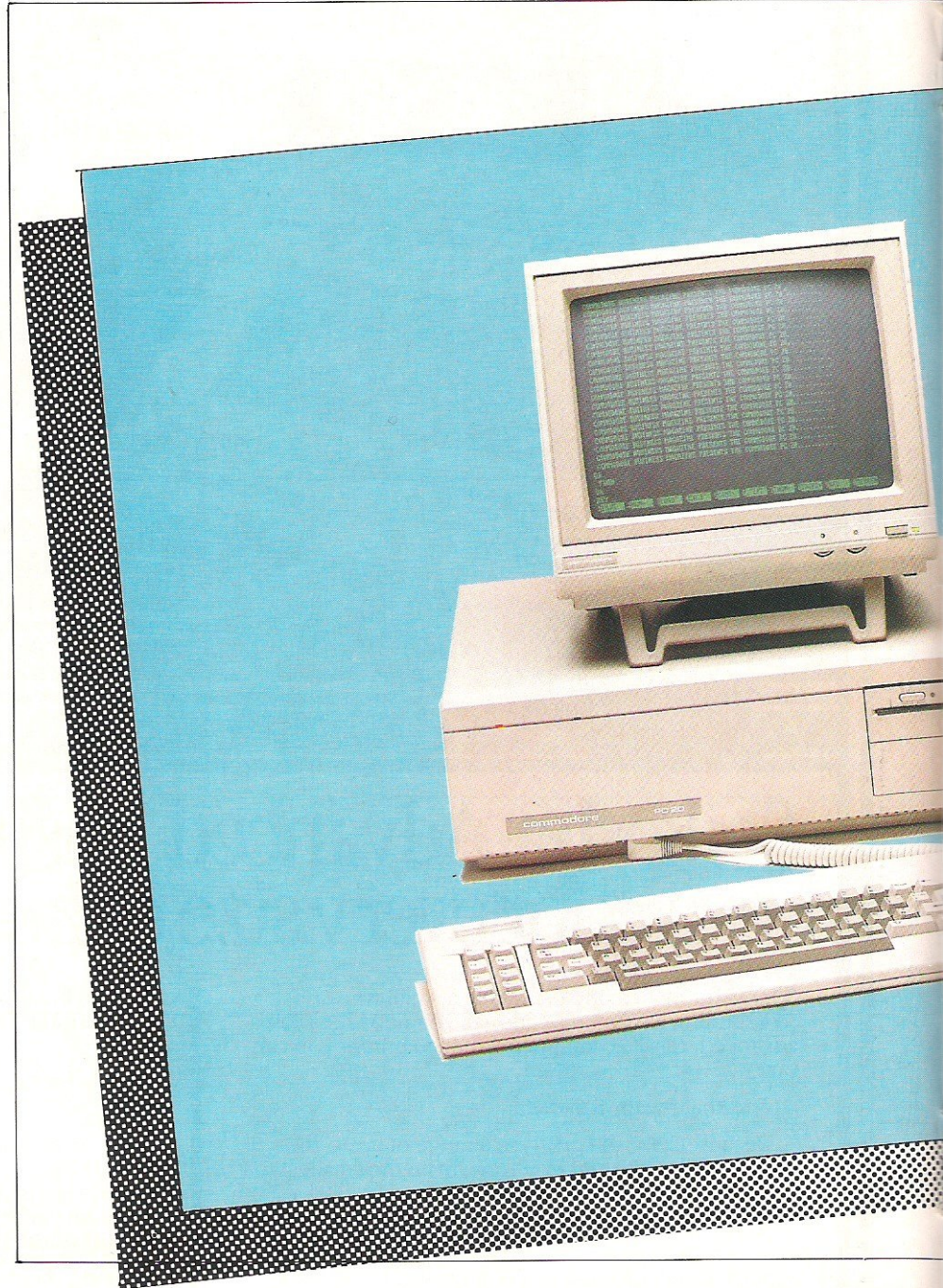
Nearly all the remarks we made on the PC10 equally apply to the PC20. Of course the hard disk version gives greatly superior storage capacity.

The only thing you have to do is partition the disk. When we first ran the PC20, we did not have the manual (are engineers faster than writers?). Commodore was very helpful to us; the level of useful support was high. No doubt as a user, your dealer would supply this function – all the more reason for considering Commodore PC's as the dealer network has been carefully checked out.

Commodore is promising a 14-inch medium resolution RCB colour monitor to be sold with Commodore's own colour control. At the present you can use a colour card and one of the IBM compatible colour monitors (around £450). The PC20 keyboard is well laid out and has useful illuminated caps and numeric lock keys, allowing full use of the business designed numeric keypad. All the keys are sculptured and have a very positive and agreeable feel to them. Very pleasant to use.

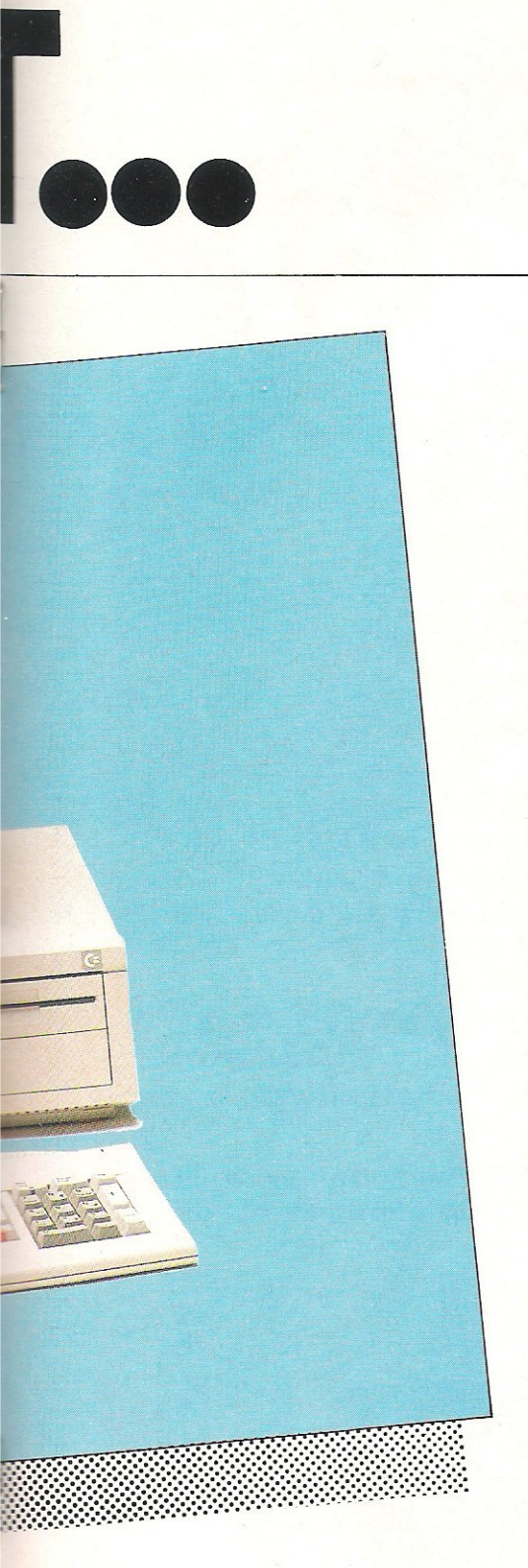
## Conclusion

The PC20 does not claim to be at the leading edge of technology. But for buyers that is often called 'the bleeding edge' and best to be avoided. It has what is probably more important – the national support and international reputation of Commodore behind it. And it also has the vital reassurance that it is fully IBM compatible at the hardware and software levels. **Overall, we**



were very impressed. Every aspect of the machine is business-like and sensible. There is little to complain of and at the economical price (£2795.00 plus VAT), it offers excellent value, above all for the smaller business or professional organization. We would recommend before you buy a PC you speak to a Commodore dealer and check it out yourself.

... T



## Business Packages— PEGASUS

We chose to test out the Pegasus packages on the PC 20 because they are some of the most widely bought by PC users and they offer a range very suitable to the smaller business environment. They are Sales Ledger; Purchase Ledger; Nominal Ledger; Sales Invoicing; Job Costing; Stock; Bill of Materials and Payroll. This test covers Sales Ledger and Sales Invoicing (see subsequent issues of Commodore Business Magazine for the other packages).

When buying Pegasus packages – and this applies to much other business software too – you should realise that it is not just a ‘get it, shove it in and off you go’ situation. You almost certainly will need advice, help and guidance from your dealer, accountant or some other reliable

source. You may even choose formal training (see article in this issue).

This is important because mistakes can be very costly. Failing to understand the system could well lead you into problems at a later stage. For example, understanding the ‘code’ in the Sales Ledger with regard to discounting in the Sales Invoicing. There are, indeed, a number of areas where you can save yourself the time and inconvenience of having to go back and do something over if you ensure you understand the system well before putting it into full use.

### What You Get

**THE MANUAL.** The Manual is a solid attractively presented document, divided into self contained sections for each of the packages.

Two points: first, it contains a generous sprinkling of useful illustrations – which you will actually see on the screen and second, the helpful use of highlighting in the text of matters that require decision or action. For example “set this option to ‘yes,’” followed by an explanation of the consequences of the action. Very useful.

The same format is followed throughout the manual’s various sections. Two small caveats: it would be useful, where packages need to be integrated, for there to be a table which set out the available options in each of the packages, to allow you to appreciate the total system before ever putting fingers on the keyboard; and what is lacking is a pre-printed form for the recording of responses to questions in the respective parameter files, (we wrote our notes down the margins of the manual. Very untidy, we admit).

### Starting Up

The whole system is menu-driven with a number of levels.

1. Main Application
2. Individual Aspects
3. Taking you to the individual program.

# Up and Running – Software Test

**It was all very quick and easy to operate.** Information appears at both top and bottom of the screen telling you where you are and what you need to do.

### Sales Ledger

The information you need to tell the Sales Ledger for each customer is a maximum four character code, name and address, credit limit, 2 digit analysis code (salesman territory etc). and open item or balance forward system (ask your accountant if you don’t know what that is!) Three points to note:

1. There is an 18 character comment box (for customer personal details, contact person etc.). We should like to have seen contact name and phone number as separate items.
2. Name and address is really statement name and address. There is no apparent facility for a different invoice address (for branch accounting).
3. The prompts are boxed, very clearly presented and easy to move around.

By the way, the Sales Ledger has an interestingly sophisticated analysis code structure which incorporates the 2 digit code in the customer name and address set up plus an additional 4 character code for identifying individual transactions. The

# THE PC20

# Safety Fast

**Our Alpha 10 removable cartridge mass storage unit gives you a faster way to get 20 Mbytes SAFELY stored.**

Just one of a whole range of removable cartridge units with capacities from 5Mb to 40Mb, the Alpha 10 is faster than most Winchesters but with the convenience and ease of use of floppies.

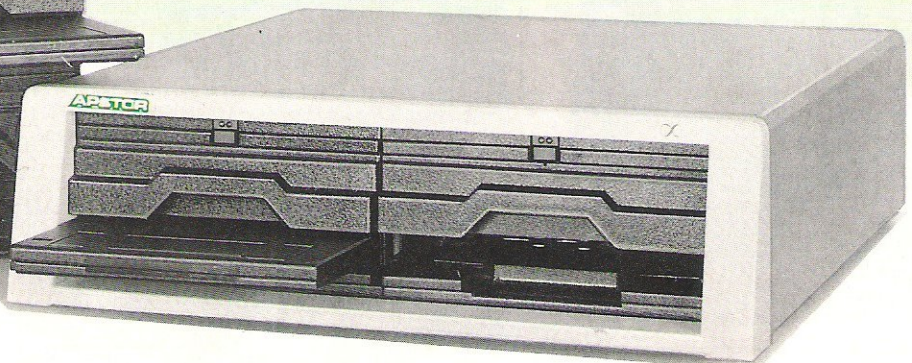
You can use the Alpha 10 with almost any micro. As well as the IBM PC it's compatible with ACT Sirius, Apricot, Apple, Commodore and Digital.

The Alpha 10 is far and away the most cost-effective solution to your on-line storage and back-up requirements.

## The Alpha 10 - Mainframe Technology for your PC.



Alpha 10 Vertical Format



Alpha 10 Horizontal Format

- Winchester-like capacity and speed.
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- Both cartridges removable for absolute data security.
- 20Mb on-line capacity - expandable to 40Mb on-line and infinite off-line capacity.
- Copies 10Mb in 3 minutes [dependent on host].
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- Highest reliability of any disk system and simplest to service.
- 35 m. sec access time.
- Runs on the IBM PC, XT, AT and IBM compatibles plus most MS/DOS micros.
- "Plug in and play" installation with user-friendly software.

**Up to 20 Mbyte capacity on line.  
Infinite back up capacity off line.**

# APSTOR LTD

Unit 5, Victoria Road Trading Estate,  
Portslade, Brighton, Sussex.  
Tel: (0273) 422512  
Telex: 87351

system therefore allows you to generate a very wide variety of reports.

Standard information you can obtain:

1. Statements
2. Agent Debtor's List
3. List of Accounts
4. Total Outstanding Debtors
5. Four Analysis Reports (3 of these incorporate the 6 character analysis coding mentioned above, tailored to your own requirements; the fourth being V.A.T.)
6. Three Debtors Overdue Letters.

In addition, it also allows use of a report generator to produce ad hoc information.

## Invoicing and Sales Order Processing

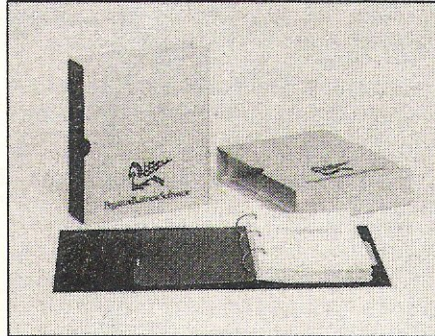
This follows exactly your normal procedure of receiving order, logging it in, processing it and (hopefully) getting paid.

The system allows the Sales Order Processing to integrate with the Stock (not subject of this review).

The Sales Order requires Account Number, Date, Order Number Due Date, Product, Quantity and Price.

Order acknowledgements can then be prepared and reports obtained of outstanding orders, including completed and cancelled orders. The invoices will then be produced automatically if the sales order processing has been properly integrated

with the stock and invoicing applications. Ours were produced by going into the invoicing. However you might not want to do it that way particularly if you have any stock control requirements. The invoicing sub-menu allows for production not just of invoices but also of credit notes, proformas and quotations. In addition there is



the usual invoice information (including delivery address, which may differ from customer name and address). There is also a two line (75 characters each) space for comment.

The invoices – sales orders, though obtainable directly from the Pegasus stationery subsidiary are in a standard format. But, if you wish, you can within the program generate these to fit your own requirements. You may, however, need some help from your dealer or adviser to do this.

## Conclusion

**Pegasus – or at least the software tested here – is clearly a very good and highly useful business package.**

What we particularly liked about it was that the setting up of the system is relatively easy for the vast majority of user applications. The ease of use is increased by a manual that is genuinely informative as to the real meaning of the options available. It is to coin a cliché, truly user-friendly. The system is well laid out, thoughtfully constructed and aesthetically pleasing. It is very satisfying to use and master.

All in all, we thought Pegasus a very comfortable tool to assist the small or medium size business to fulfill its needs with the minimum of difficulty and the maximum of efficiency.

There is no recommended retail price, but you would normally expect to pay between £275 and £400 per module, depending on the level of training and support given you by the dealer.

B.J. Lewis

## The PC - the Specification

### SPECIFICATION

#### CPU

8088 Processor  
8087 Co-processor (optional) = maths processor  
4.77 MHz clock rate

#### Memory

Main RAM size  
256K RAM Standard  
Internally expandable to 512K or 640K.  
Externally expandable using full length expansion boards to 640K.

#### ROM size

Standard 8KB

#### Display

12" CRT (non glare phosphor green)  
13" medium resolution RGBI colour monitor (available shortly after launch)

Alphanumeric B/W char resolution 9 x 14  
80 x 25 character display  
Colour and Hi-Res graphics are not in the standard configuration at launch.  
Compatible cards are available to provide colour and HiRes graphics

#### Storage

Dual 360K/byte, 5 1/4" double density, double sided disk drives (PC-10)  
Format: (IBM® compatible): 40 tracks, 9 sectors/track.  
or

Single 360K/byte, 5 1/4" disk drive plus 10M/byte hard disk (PC20).

#### External Storage

The internal floppy disk controller is able to handle up to 4 drives. 2 internally; 2 externally.

Controller is capable of supporting two Winchester drives with a capacity of up to 70M/bytes per drive.

#### Expansion

5 full sized PC compatible expansion slots  
4 usable in PC10  
3 usable in PC20

#### Keyboard

Detachable keyboard  
85 keys including 10 function keys and numeric keypad.  
Meets European DIN requirements.

#### Interface

Parallel Printer port (Centronics)

#### RS232C port

Monochrome video output  
Composite B/W video output (not in the standard configuration at launch)

#### Operating System

MS-DOS

#### Language

GW Basic

Optional programming languages: Cobol, Fortran, Pascal, Macro Assembler etc

#### Physical Specifications

|                 |              |
|-----------------|--------------|
| Base Unit (CPU) | Ht 14.5cm    |
| width 49cm      | depth 39cm   |
| Monitor         | Ht 27.7 cm   |
| width 30.3cm    | depth 29.3cm |
| Keyboard        | Ht 4.0cm     |
| width 49cm      | depth 17cm   |

#### Power Supply

CPU 240 VAC 170 watts, 50Hz  
Monitor 240 VAC 30 watts, 50Hz

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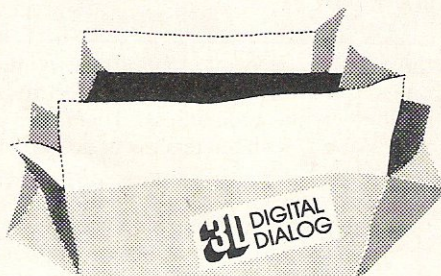


take the wraps off

# DIGITAL DIALOG

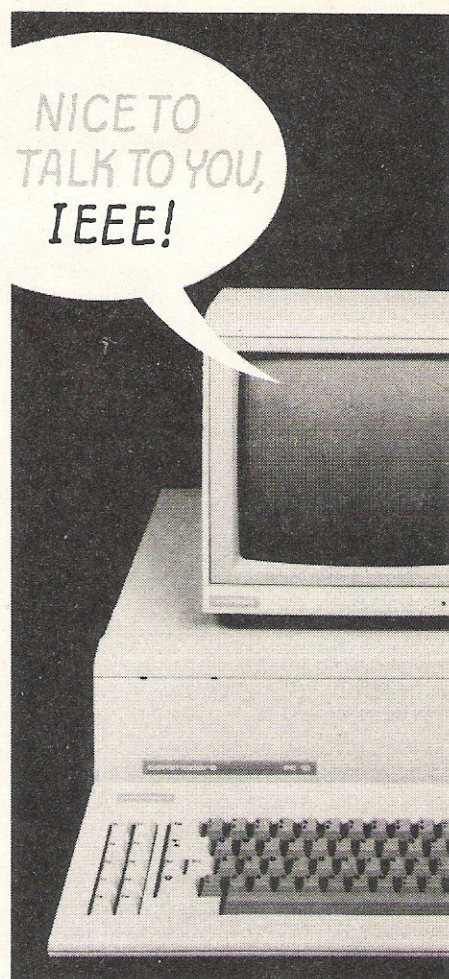
A compact BUS converter that lets your Commodore 8032/8296 talk to the new PC10 or any other IBM compatible micro, and vice versa.

2K buffer. DTR, CTS and X-ON/X-OFF. Programmable Baud rate 50-19200, data format & Commodore code conversion.



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## PRINTER BARGAINS

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  - \* 120cps. draft mode.
  - \* Tractor and friction feed standard.
  - \* Near Letter Quality mode included.
  - \* 192 graphic mode characters.
  - \* 192 business mode characters.
  - \* 90 italic characters.
  - \* 90 NLQ characters.
  - \* Normal 80 cpl. Condensed 136 cpl.
  - \* Enlarged 2X, 3X & 4X.
  - \* Supplied with interface/cable and mains plug
- READY TO GO.

Seikosha GP100VC Commodore compatible with cable .....JUST £129

### TAXAN PRINTERS

KP810..... £279  
 KP910..... £399  
 KP810 IBM ..... £359  
 KP910 IBM ..... £459

Printer cable Commodore PC ..... £32  
 Zero Interface CBM 64 ..... £45  
 Tripler Interface CBM 64 ..... £45

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|                | Per box of 10 |            |
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|                | 1-9 boxes     | 10 + boxes |
| 3" MAXELL CF2  | 46 00         | 36 00      |
| 3 1/2" FUJI DS | 47 00         | 37 00      |
| 5 1/4" DYSAN   | 20 50         | 16 10      |
| SS/DD 48 tpi   | 29 50         | 22 50      |
| SS/QD 96 tpi   | 29 50         | 22 50      |
| DS/QD 96 tpi   | 37 50         | 28 60      |
| 5 1/4" NASBUA  | 14 00         | 9 90       |
| SS/DD 48 tpi   | 16 60         | 12 60      |
| DS/DD 48 tpi   | 19 50         | 14 75      |
| SS/QD 96 tpi   | 21 50         | 15 50      |
| DS/QD 96 tpi   | 24 00         | 17 50      |

8", HARD SECTOR AND PREFORMATTED DISKETTES AVAILABLE  
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# Learning the business computers

As with any other aspect of business, computers need understanding to yield the greatest profit. The complexity of many business packages means that expensive mistakes are best avoided by some form of training – although choosing the exact form of that training may well prove confusing.

How much training do you need? Who is the best source and who, in your organisation, needs to be trained, are just a few of the questions you may need to answer.

## Computer Based Training

Today, there is a growing use of Computer Based Training (C.B.T.), which means that you may not even have to leave your office, or to have anyone else involved – in effect training yourself with the aid of your own computer.

There are, of course, a number of training establishments that offer help. Dealers nearly always provide aid to learning, which may be linked to a specific machine. Most good dealers will also train you to use the business software packages you need, and the business packages are, after all, your reason for wanting a computer.

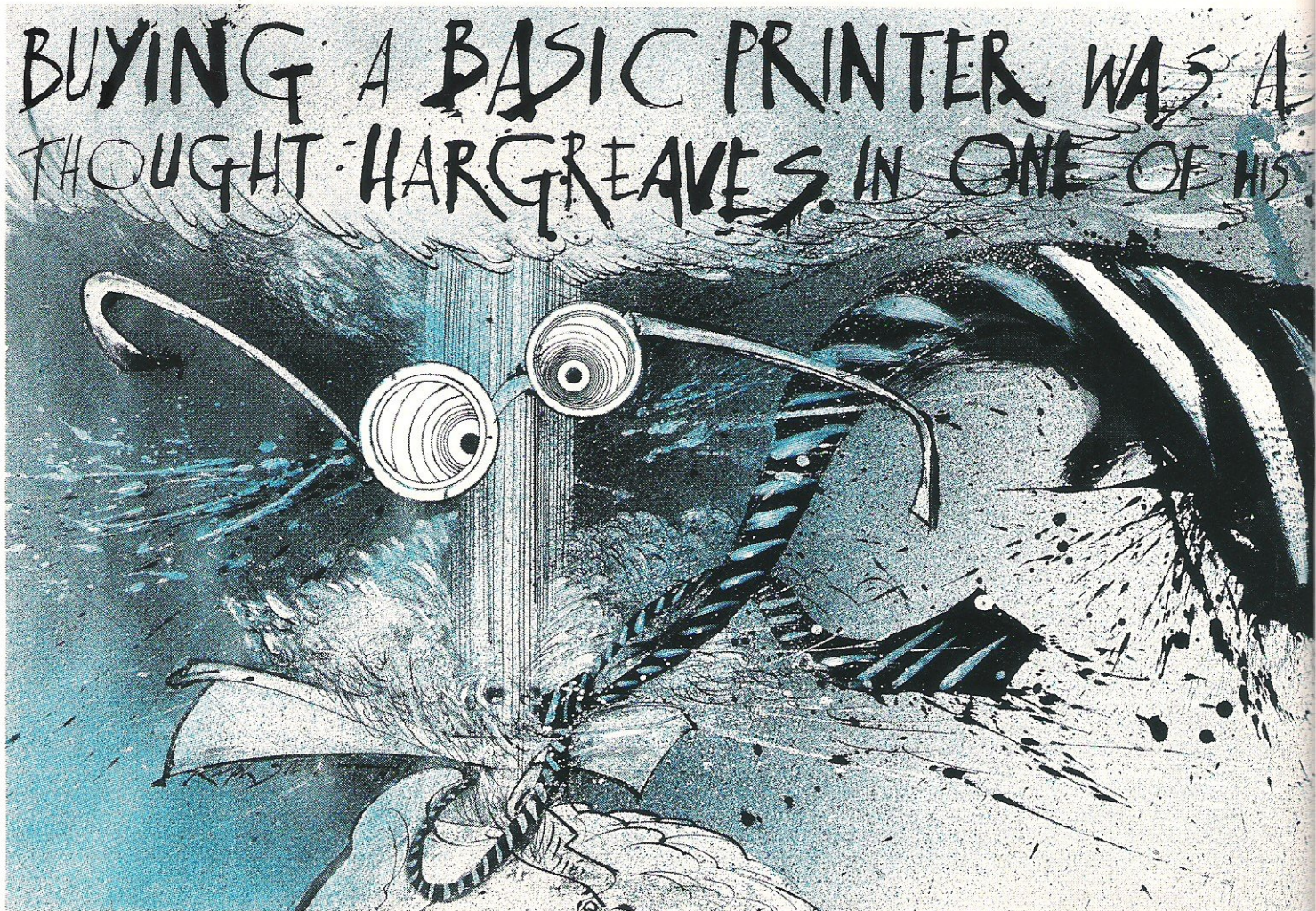
**When computers play an important role in your business, the last thing you want are expensive mistakes caused by the complexity of some business packages. We offer some guidelines to computer training.**

There are other sources such as WH Smith's new Business Computer Centres which offer economical one day introductions to microcomputers. There is also an increasing number of Micro-systems Centres for Consultancy and Training. These are a part of the Micro Centre Federation (061-228 6333), which is connected to an official body – the National Centre for Information Technology. There is no official validating of courses, or officially accepted standards, but you can obtain from them a directory of training courses (£25 per copy).

## Annual Directory

There are plans to set up an Information Technology Training Accreditation Council, which is to publish an annual directory of training companies who reach required standards.

The directory is largely aimed at the growing number of foreign students coming to the UK to study computing. Indeed, one of the phrases to note in any prospectus of a training establishment is 'students should have a reasonable fluency in English'. This probably means that the major-



# s of

ity of students attending the course are from abroad and the establishment's standards may not be as high as if they were dealing with local business trainees.

## Computing grants

An interesting and little known fact is that there are for businesses employing under 500 people still computing grants available from the Department of Trade and Industry, via the Business and Technical Advisory Service. This is administered by PERA (0664-501501), or in the northwest UK by Salford University Industrial Centre (061-736 8931). They will consider any kind of computer application up to £5,000 – 15 days of consultancy; The first two days free and 75% of counselling fees for the other 13 days.

The Computing Services Association (01-405 2171) – an independent body can also be helpful. It will inform its 240 member companies of your interest through its free Commercial Enquiry Service.

## MicroTutor

The ASI MicroTutor range of interactive software provides a complete library of Computer-based Training programmes for the IBM PC and compatible micro-computers.

Using a "split-screen" approach, an application package such as Lotus 1-2-3 or WordStar is displayed on the top half of the screen and the tutorial on the lower half. The program then takes the user through the software in easy to follow steps providing effective training on all aspects of the system.

The main benefits of MicroTutor are:-

- 1) The package is a complete training course.
- 2) The 'modular' design allows the user to choose one particular part of the program to be cleared.
- 3) An emphasis is placed on user-participation to ensure full understanding and increase the level of interest.
- 4) Also, the tutorial program can be used by any number of users, hence reducing the cost of training.

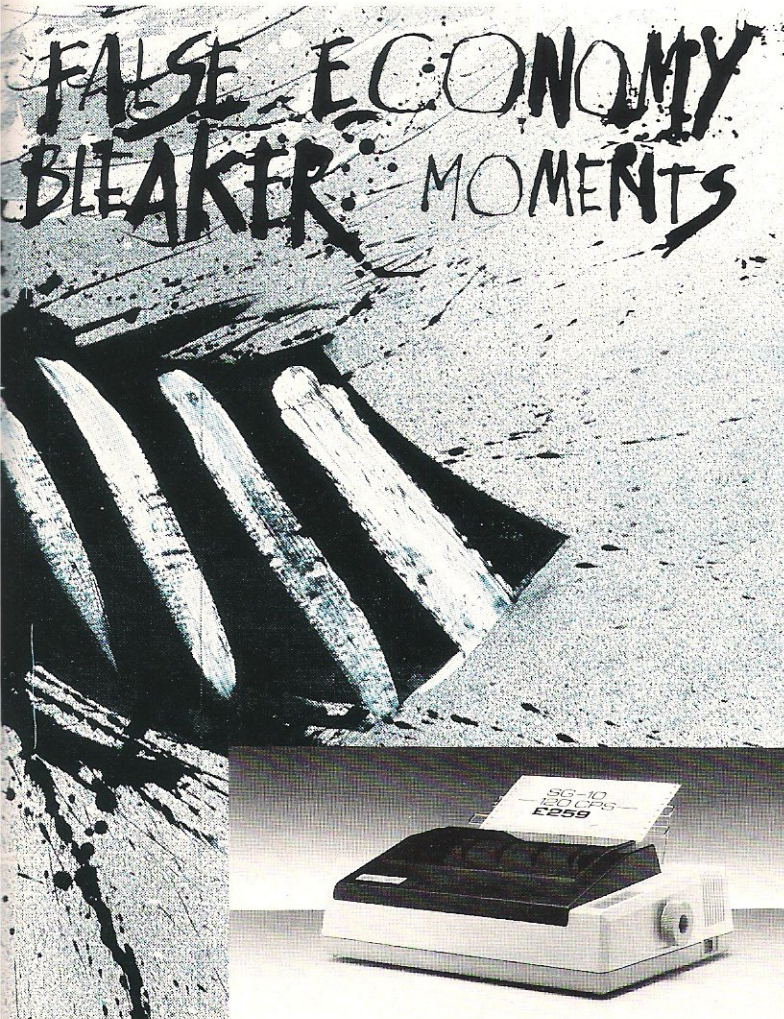
We tried out the Lotus 1-2-3 course and found it very easy to use and highly recommendable.

## Visual training

There is also an interesting number of developments in the video cassette field. These are a clear way of presenting individual machines, application packages or even programming languages.

There are, of course, manuals and books. The size and complexity of these (we recently came across a 535 page manual!) are very often a natural cause for alarm for any busy and still rational manager.

For anyone as full occupied as most managers of small businesses, CBT is probably the most useful answer. A growing number of companies supply relatively cheap packages – disks or other simple to use aids. We will be covering this increasingly important aspect of training (see box) as a subject in its own right in subsequent issues of Commodore Business Magazine.



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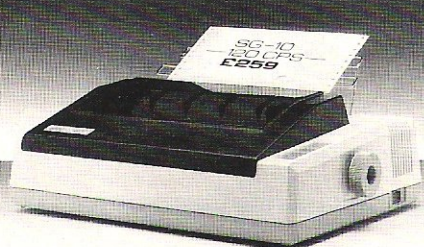
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# Operating the Amiga

**Commodore's forthcoming Amiga has created a great deal of interest. In our next business magazine we will be covering it extensively; to whet your appetite Francis Jago introduces the Amiga and its disk-operating system produced by Metacomco.**

It must have come as quite a shock to many leading software houses in America when it was announced that Metacomco had been given the contract to produce the Disk operating system for the long awaited Amiga.

To Metacomco it must have seemed like a dream come true. It started when they were asked by Commodore to produce an Assembler for the Amiga, which they did. Having completed it to Commodore's satisfaction they were then asked – completely out of the blue – to create a back-up operating system within four weeks. Luckily for them, Metacomco already had a tried and trusted O.S, Tripos. Although also 68000-based, Tripos had to be considerably altered to make it suitable for use on a machine such as the Amiga.

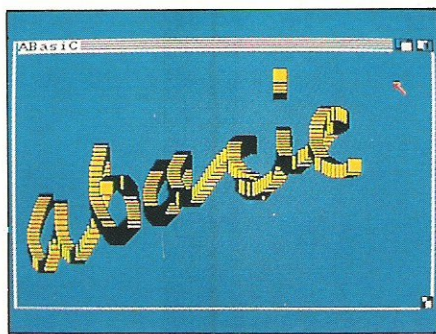
When the original operating system failed to be completed on time, Metacomco were in the perfect situation to step in and grab the contract.

Tripos was originally developed in 1976 at Cambridge University, from where it went with different people to Bath University and also stayed at Cambridge. Tim King, the research and development director of Metacomco, took Tripos to Bath and developed it as a Multi-tasking 68000 operating system of great potential.

Having produced the D.O.S., Metacomco were then approached to produce a Basic to run on the Amiga. Never ones to turn down an offer like that, Metacomco produced A-Basic.

**“An operating system of great potential”**

The Amiga uses windows and mouse-accepting icons to use the computer without bothering with the complications of a Command Line interface. The pull down windows are extremely smooth and fast, and the brilliance of multi-tasking allows you to have different jobs taking place in different windows. A very good demonstration of this was when three differing graphical programs were run in



three windows whilst you could still be using the computer for something else, without an enormous speed decrease.

A-Basic is very comprehensively covered for instructions and it can be used to run programs fast enough to please all Basic programmers who have no desire to learn 68000 machine language. This is well shown in our two screen shots, both of which were produced using a short and uncomplicated Basic program.

As a computer, the Amiga has created a huge amount of public interest and from what I have seen this is totally justified. It runs at 8 mhz, and has graphical capabilities superior to that of any home/business

**“Comprehensively covered for instructions”**

machine I have ever seen (Pluto boards included). Fortunately, unlike some rather more famous mouse driven machines, the actual operating system and Basic does not let it down. The Basic can also handle true multi-tasking, allowing you to run two separate basic programs at once, although as yet two programs cannot share the same code whilst running independently.

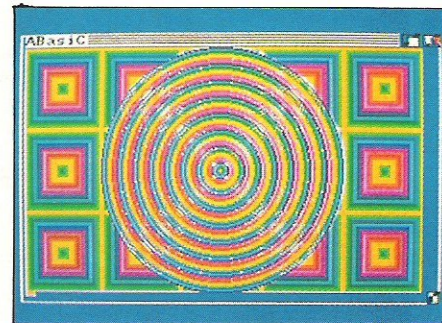
The Basic graphics commands are amazingly comprehensive for such a high level language, and this only serves to heighten the endless possibilities for the competent programmer using A-Basic. As well as superb graphics, the Amiga has not been let down in the sound department. With stereo sound, MIDI interface and built in speech synthesis it achieves some outstanding effects using uncomplicated com-

mands such as ›TRANSLATE‹ and ›NARRATE‹ which, when used in conjunction with each other, create clear and well defined English using the well established Phoneme method. One totally amazing feature of the Amiga's sound capabilities is

**“A product of a very high standard”**

its Fairlight CMI data compatibility. This means a relatively non-expensive home computer can manipulate the data from a 28,000 synthesiser.

Although all the DOS commands are accessed off disk at present, this presents no real problems as the disk is fast, and you can always do something else whilst you wait!



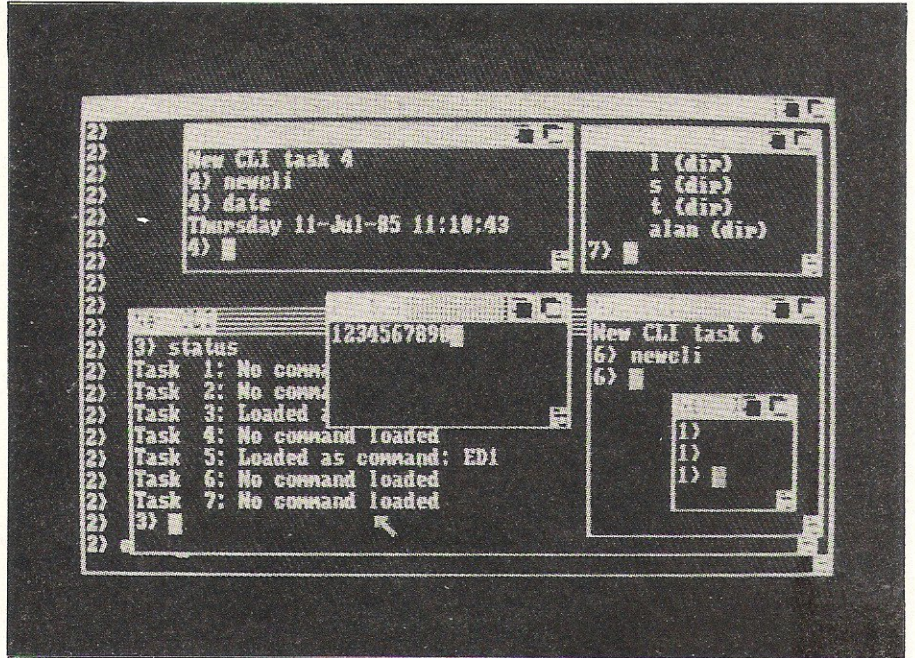
Overall, Metacomco must be congratulated for persevering and putting all the hard work necessary to secure a contract of this importance. The product they have come up with is certainly of a very high standard and hopefully they will continue to flourish. What we must really hope for, however, is that Metacomco have proved to the Americans that big is not necessarily best. In winning this contract over the likes of Microsoft and Digital Research it has proved that Britain can keep up with the rest of the world when it comes to get up and go!

Amiga DOS has already been accepted by many major software houses and they have agreed to provide many important packages for the Amiga, which is a truly superb computer. **FKJ**

Contact: Metacomco, 26, Portland Square, Bristol BS2 8RZ. Tel: 0272 428781.

# AmigaDOS —times 7 tasks

The forthcoming Amiga will have substantial advantages to offer users; not least the outstandingly flexible Metacomco-written operating system which incorporates multi-tasking and has already aroused notable interest. The illustration shows an example of how the multi-tasking facility may be used.



Amiga display showing features of the multi-tasking Amiga DOS operating system that was written by Metacomco. Here you can see a screen with seven tasks running simultaneously. Note how Task 3 (lower left hand window) is showing the status of each task. For instance, Task 5 (centre screen) is a screen editor.

## Get Organised

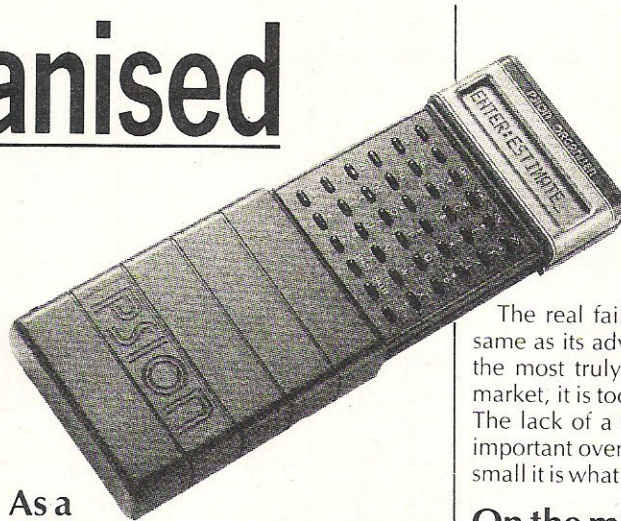
For the businessman who really does have everything, the Psion Organiser represents another chance to open his chequebook! Seriously, what the Organiser does show is how small computers can really get, and how the future of computing might develop.

The Organiser is roughly the same size as a Sony Walkman, and is truly pocket-size. When opened and turned on it displays the time and date and then gives you a series of alternatives as to what to do next.

### Running Programs

To run programs you must turn off the computer and then plug an eprom-sized cartridge into the rear of the Organiser. These can be any of the packages Psion make, including utilities, communications packages, and basic text editing.

The Organiser is a very neatly put together package, the screen is clear and adjustable (although it is only one line and therefore impractical for real use), and the keyboard is no worse than a calculator.



### As a Communication device

The most impressive function of the Organiser is as a Communication device. Using the Comms pack and cable, you are able to plug it into any RS232 or RS432 socket and load data either from a host computer or, theoretically, from an on-line computer via a telephone link and modem. Included in the manual is a basic program to transmit data to and from a PC and without too much difficulty this can be extended to transmit Wordstar compatible text files.

The real failing of the Organiser is the same as its advantage, size. Although it is the most truly portable computer on the market, it is too small to be of any real use. The lack of a qwerty keyboard is also an important oversight as, even if it were very small it is what everyone is used to.

### On the move

If you really need a portable computer on which you can type in documents whilst on the move and then load and edit at home, don't buy the Psion. If, however, you are looking for a glorified calculator which, if pushed, can act as terminal or text editor then look no further. Price £99.95.

Contact: Psion Limited, Psion House, Harcourt Street, London, W1A 1DT. Tel: 01-723 9408.

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| Data Maintenance Ltd.<br>London<br>Tel: 01-771 7111                    |        |        | ✓     | ✓        | ✓     | ✓        | ✓           | ✓           | ✓             | ✓         |          |        |         |         | ✓      | ✓          | ✓           | ✓         | ✓        | ✓            | ✓          | ✓           | ✓ |
| Computer Supplies (Swansea)<br>Swansea<br>Tel: 0792-290047             |        | ✓      | ✓     | ✓        | ✓     | ✓        | ✓           | ✓           | ✓             | ✓         | ✓        | ✓      | ✓       | ✓       | ✓      |            | ✓           | ✓         | ✓        | ✓            | ✓          | ✓           | ✓ |
| C.W. Cave & Tab. Ltd.<br>Northampton<br>Tel: 0604-43677                | ✓      | ✓      | ✓     |          |       |          |             |             |               | ✓         |          |        |         |         | ✓      |            |             |           |          |              |            | ✓           |   |
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| Copyrite Computer Supplies Ltd.<br>Surrey<br>Tel: 01-684 6940          | ✓      | ✓      | ✓     |          | ✓     | ✓        | ✓           | ✓           |               | ✓         | ✓        | ✓      | ✓       | ✓       | ✓      |            | ✓           | ✓         | ✓        | ✓            | ✓          | ✓           | ✓ |

# Multi-user, Multi-tasking

Commodore's 900: a unix-based computer originally scheduled for a November release. Plans for its future now seem uncertain. We show you what it looks like and reveal its specifications.



The Commodore 900 UNIX™ -Compatible Computer System is available in two configurations:

- The powerful UNIX™ -compatible personal workstation with a 1024 × 800 resolution bit-mapped display offers a graphics quality which until now could only be found in machines costing at least 5 times more. This is coupled with Commodore's own window manager with mouse control, which provides a sophisticated but friendly user interface which is fully integrated with the UNIX™ -compatible operating system. Each window offers a full virtual terminal UNIX™ -compatible environment.
- The powerful multi-user UNIX™ -compatible business computer. In this configuration the UNIX™ -compatible operating system provides full multi-tasking, multi-user support which will allow up to 8 terminals, each providing a full UNIX™ -compatible environment. A high performance hard disk of up to 67 megabyte is supported to facilitate multiple users and provide adequate space for application data bases.

## THE STANDARD FEATURES OF THE COMMODORE 900 ARE:

- High performance 16-bit CPU with 16MB address space.
- Sophisticated Memory Management Unit implemented in hardware. This provides the underlying memory protection essential for supporting a secure environment for a multi-tasking, multi-user operating system.
- 512 KB memory, expandable to 2MB.

- Hard disk drive capacity up to 67 MB (20MB minimum) formatted.
- 1.2MB Floppy disk drive. An additional optional drive can be added.
- Console terminal with full function detachable keyboard which includes:
  - A 15 inch, high performance (72 MHz dot rate and 60 Hz refresh rate), monochrome monitor coupled to a video controller with its own dedicated 128KB display memory and hardware supported raster operations (custom two dimensional bit-blt chip) and 3 button mouse
  - OR
  - A character mode (80 × 25) monochrome monitor with extended attributes.

- Battery backed-up realtime clock.
- Two RS232-C communication ports.
- Centronics compatible parallel printer port.
- IEEE 488 port.

- ROM-based power-up diagnostics which check out complete system.
- 4 expansion slots.
- Multi-user, multi-tasking UNIX® compatible operating system. Included is a high-performance 'C' compiler, more than 50 system utilities and a 'business' BASIC compiler. Additional languages are available.
- Sophisticated Window manager software which allows multiple overlapping windows to be created and manipulated. Each window is effectively a full function 'virtual' terminal. Both text and bit-mapped graphics windows are supported. Different font styles and sizes are available and can be mixed.
- Hardware Options:
  - Streaming cartridge tape (for hard disk backup) or additional floppy disk drive.
  - Memory expansion up to 2MB.
  - Hard disk options of 40MB or 67MB (20MB standard).
  - Multi-user card, with an additional 8 RS232-C ports.
- Systems Software Options:
  - COBOL language environment.
  - Pascal compiler.
  - Virtual Device Interface (VDI) for transparent handling of different graphics devices
  - Graphics kernel system (GKS) subroutine library
  - Plotting package facilitating simple generation of graphs (pie charts, histograms, line graphs, etc.).



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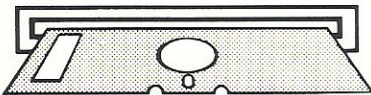
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## for the CBM

### C64 / C128

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**Price Cassette £29.95 Disc £34.95**

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**Open Item Accounting System  
Fast creation of invoices from product tables  
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Create Invoices and Credit Notes  
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Suspense Accounts featuring automatic transfers of unallocated payments

Outstanding Invoices  
Full Transaction Reports  
Full Statement Runs  
Monthly Sales Reports  
Aged Debtors Lists  
Mail Labels for clients Names and Addresses

Auto Invoice Numbering  
Monthly deletions of paid invoices  
Deletion Reports  
Change date option

**Requires no additional hardware  
Runs on single or twin drive systems**

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#### **PURCHASE LEDGER**

**Open item Accounting System, Automatic payment runs, Print remittance advice notes, Allows for settlement and trade discounts, Cheque writing capability, Extensive reporting to screen and printer, Suppliers referenced by name or part name**

Allocate payments or part payments against, Supplier invoices, Account Enquiries, Amend Supplier Terms, Amend Supplier Details, Suspense Accounts for prepayments

Outstanding Supplier Invoice Reports, Full Transaction Reports, Monthly Purchase Reports, Aged Creditors Lists, Mail Labels for Supplier Names and Addresses

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# Business Software

## STOCK-AID Stock Control System

### Single Screen Format displays:

**Reference:** Unique Stock Code/Description/Supplier

**Prices:** Current Unit Cost/Current Unit Sale

**Inputs:** Units Bought & Value to date + number of Transactions

**Outputs:** Units Sold & Value to date + number of Transactions

**Re-orders:** Minimum Stock Level/Units to re-order & Value

**Update:** Balance & Value of Stock/Profit of Sales

Enter & Amend Reference/Prices/Minimum & Re-order levels.

Delete Record where no Stock remains.

Input & Output Stock as Transactions or Adjustments.

Recall last entries on Inputs & Outputs with process dates.

Browse through File 'window', retaining current record on view.

Find a Record by its Stock Code.

Display previous or following Record on File.

Print Record on view.

Compare last unit Cost & Sales Prices with Current preset Prices.

Update total Number of Lines, Stock Value, Inputs & Outputs.

Scan Reference fields by either order-of-input or sorted sequence.

Available to Screen or Printer are:

Re-order Stock Schedule: Stocks below preset Minimum levels.

Valuation of Stock in Hand: Balances carried forward.

Deletions: Reported by Reference only.

Output to Printer only:

Financial Report: Inputs & Outputs to date.

Current Prices - Unit Cost, Unit Sales & Margin.

Physical Stock Take Sheet: Space for 'actuals' & 'differences'.

Transactions Report: Inputs & Outputs for process date.

Rename File

Sort File by any Reference field.

Disk Directory/Format Data Disk

Printer - Line Feed & Controls

Decimal Placing for Units & Prices

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## DFM DATABASE & Mail Labels.

### Fully user definable Record Base

Create up to 15 Fields per Record

Define Field Headings Fields may be Alphanumeric (up to 36 characters)

Fields may be Numeric to 9 figures (zero 2 decimal places)

File Name may be changed at any time

Find Record by Key Field or (allocated number)

Amend Field Heading or Record Data

Calculate or Totalise on Numeric Fields

New Records may replicate from last Record viewed

Print or Delete Record on display

Move to Next or Last Record

Automatic Scroll forward through File (with Stop option)

Enter Details and Field selection for Search

Criteria may be specific or wild-card

Related numeric field information may be totalised

Specific Numeric Field Searches offer conditions

of less than/equal to/greater than (operands)

All Results may be output to Screen or Printer

Offers printed reports on selected Field

Full File Description is available for report planning

Field Totals will be output for any Numeric Fields

Define Label Print Format

Selectable Single Label Printing

Sorting may be performed by any Field type

New Key Field Index may be displayed

Utilities include Memory Available & Disk Handling routines

**Price Cass. £14.95 Disc £19.95**

## Home Accounts Manager

**HOME ACCOUNTS MANAGER** is a comprehensive home management system designed to assist in the maintenance of any household budget. There are 4 major options from the main menu as follows:-

**2. BANK ACCOUNT** After entering details of your bank, branch and account number, you are able to enter all standard bank transactions, such as receiving payments, issuing cheques, setting up standing orders, entering bank charges, entering cash dispenser transactions and obtaining a bank statement to the screen or to a printer.

**4. UTILITIES** This option has a number of useful features plus full loans calculator for fast estimates of loan repayments.

**1. HOME ACCOUNTS** Day to day expenses are entered and will be collated by the program to produce detailed expenditure reports to the screen or to a printer. Cheque payments are automatically posted to the bank account.

**3. ADDRESS FILE** You are able to enter up to 50 names, addresses and telephone numbers into a file which may then be sorted into alphabetical order, searched for particular names, scrolled in forward or reverse directions, or re-entered at a specific record number.

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For the  
COMMODORE PC

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VIZAWRITE can also proof-read your work, excellent at picking out those 'juggled' words that get typed when the phone rings.

Document statistics, how many words you've typed, VIZAWRITE shows you — instantly.

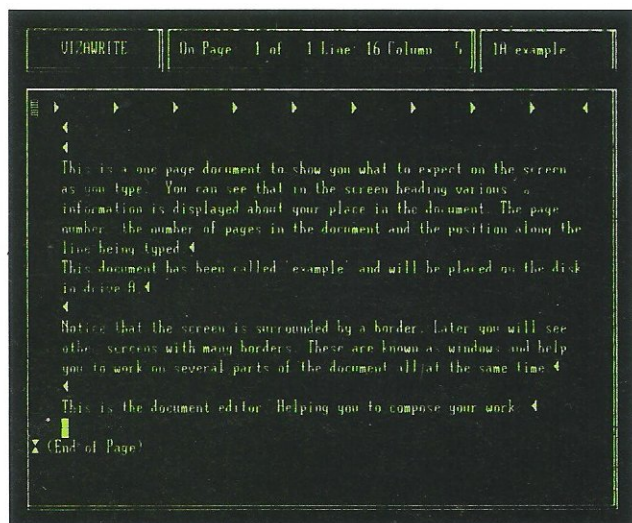
VIZAWRITE is so easy to use, THE TIMES featured it again and again in no less than three separate articles on word processing for newcomers.

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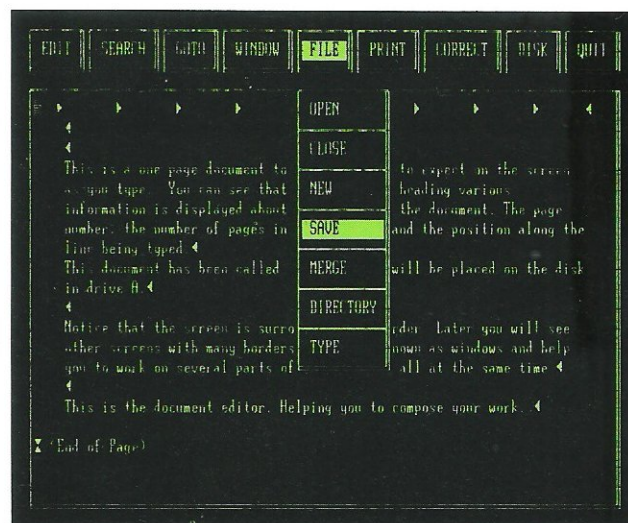
VIZAWRITE is an extremely advanced word processing package with powerful layout and filing commands, fully integrated spelling checker and easy to use mail shot system.

Remember that VIZAWRITE has achieved an ease of use that you won't find in any specification.

It's intuitive, simple and fast.



The Document Editor Screen

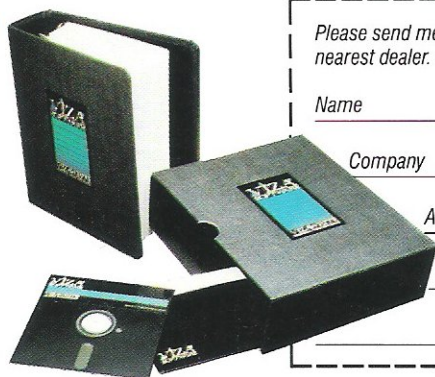


The Command Menu

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